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REMARKS

The amendments and remarks presented herein are believed to be fully responsive to the recent Office Action. Enclosed herewith is a petition and fee for a three-month extension of time in order to extend the response due date to December 12, 2003. Reconsideration is requested.

Claims 1-20 are pending in this application, responsive to a communication filed on August 17, 2001. Claims 1-20 have been amended to better define the invention. Favorable reconsideration and allowance of the subject application are respectfully requested in view of the following comments.

The requested abstract is provided.

The Applicants claim the benefit of 35 U.S.C. 371 of PCT/EP99/09146 at page 1 of the specification.

The Examiner has rejected Claims 1-20 under 35 U.S.C. § 112, second paragraph. Claim 1 has now been re-drafted along the lines suggested by the Examiner. Accordingly, Applicants respectfully request withdrawal of this rejection. The objection to dependent Claims 2-20 is now rendered moot.

Claims 1 and 9 have been rejected under 35 U.S.C. 102(e) as being anticipated by Tiainen et al. We respectfully suggest that this objection is now moot, in that Claim 1, as re-drafted, claims a beverage food product comprising a top layer and a base layer.

Claims 2-8 and 10-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Tiainen et al. in combination with Soedjak et al. and Rule.

As the Examiner acknowledges, Tiainen et al. does not teach a beverage food product including a top layer and a base layer, which, when heated, provides a liquid that can be consumed.

The first problem faced by the present inventors was to devise a beverage food product having top and base layers. The beverage is stored in a gel phase but melts, on heating. After so melting, the top and base layers of the beverage need to be maintained as substantially separate liquid layers (see the object of the invention at page 1, lines 25-30 and page 2, lines 8-9). The next problem faced by the inventors was to substantially eliminate colour migration between the

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now-liquid top and base layers and this is stated as an object of the invention at page 1, line 31 to page 2, line 2 and at page 2, lines 9-10.

Both of these problems need to be solved in a beverage food product, which has been heated to a temperature above room temperature and which is consumed at this temperature - this elevated temperature is defined as at or above 40° C at page 3, line 8.

As is taught at page 4, lines 7-13, sodium caseinate is usually included in a conventional cream liqueur product but its co-presence with alcohol, in a microwavable beverage food product, causes skin formation as the product is being microwaved.

The solution to the problem of colour migration is taught at page 4, lines 15-17 as identifying that the water content of the top layer should be limited to less than 70% (w/w).

Tiainen et al. concerns itself with a jelly-like dessert which is consumed without a final heating step.

Tiainen et al. concerns itself with gelatinised products, which are prepared (see Claim 14) by heating a jellying product; mixing same with at least one selected ingredient (which may be alcohol or an alcoholic drink mixture - see Claim 15) and allowing the free-flowing mixture to set. This is a single-phase product. Thus, for example, Working Example 2 is directed to a "gelatinised drink", "the mixture set in the glass" being "eaten with a spoon" (see column 6, lines 10-11). Working Example 3 is directed to a drinkable gelatinised drink which is "allowed to set in a refrigerator and served as a gelatinised drink". All of Working Examples 1-7 are directed to gelatinised products which are single layer products. For this reason, Tiainen et al. does not address the problems faced by the present inventors, which problems can only arise when more than one layer is envisaged. In addition, all of Working Examples 1-7 are directed to gelatinised products which are allowed to set and are then consumed at or below room temperature, i.e., without re-heating.

Soedjak et al. addresses the problem of bleeding or migration of colour between adjacent layers (see column 1, lines 25-26) during storage. This colour migration during storage under refrigerated conditions is assessed by a test set out at columns 3-4. Specifically, the bottom layer of a two-layered product contains colourant and complexing agent dissolved/dispersed in water. The composition of the top layer is not provided. It will of course

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be appreciated that Soedjak et al. is completely silent on the amount of water present in the top layer. The amount of colour migration during storage is visually assessed after storage at refrigerated temperatures (see column 4, lines 8-9).

Claim 1 of Soedjak et al. sets out the solution of Soedjak. Specifically, Claim 1 requires that the complexing agent must be either a protein material that produces a specific relative fluorescence intensity or a polyamino acid. In stark contrast, the present specification at page 4, lines 28 and 29, teaches that proteinaceous emulsifiers should be avoided since it is thought that their denaturation leads to skin formation, which is undesired.

The solution of Soedjak et al. is to provide a complexing agent which complexes with any water-soluble colourant present. Such complexing agents include soluble fractions of caseinate, a substance which is specifically excluded from the present claims (see column 1, lines 54; column 2, line 62; column 3, lines 3-9; and Claim 3 and Claim 11).

We respectfully suggest that Soedjak et al. teaches an alternative solution to the problem of colour migration, by requiring the presence of a specific proteinaceous complexing agent. The solution of the present invention is an alternative solution of limiting the amount of water present in the top layer. As is disclosed at page 4, lines 15-23, it is believed that restricting the water content of the top layer in this way reduces hydrogen ion migration from the base layer into the top layer and that it is this hydrogen ion migration which affects the pH of the top layer and may be accompanied by a breakdown in the stability of the emulsion in the top layer, causing it to lose its thermoreversibility.

The Examiner notes that Rule teaches a stable alcohol-containing, cream-based beverage (see column 1, lines 4-5). The term "stable" is defined at column 1, lines 16-20, as emulsion stability against breaking-up of the emulsion. In other words, the object of Rule is to prevent separation of the beverage into individual phases.

Thereafter, Rule makes frequent reference to stable emulsions (see column 1, line 40; column 1, line 68; column 2, lines 39-40; column 2, line 43; column 2, line 50; column 2, line 64; column 2, lines 66-68; column 5, lines 14-15; column 6, lines 8-11; column 6, lines 18-19 and Claim 1 (column 6, lines 55-56)). The object of Rule is to form a stable emulsion – such a stable emulsion has a prolonged shelf life.

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Rule is a beverage, which is stored as a liquid and which is consumed as a liquid, without a heating step. In other words, the beverage of Rule is consumed at room temperature (if stored at room temperature) or at a temperature below room temperature (if stored in a refrigerator).

Rule is a conventional cocktail mixture - there is no thermoreversible setting agent present.

In complete contrast, the present invention is concerned with a beverage food product having two separate layers, namely, top and base layers and it is an object of the present invention to maintain these layers separate even when heated.

The Examiner is, with respect, indulging in hindsight analysis by stating that it would be obvious to one having ordinary skill in the art at the time the invention was made to provide a gelled beverage food product, whose top and base layers revert into a liquid, from reading Tiainen et al. in view of Soedjak et al. This ignores the requirement in the present claims that the top layer's water content be less than 70% (w/w). This is neither disclosed nor suggested in any of Tiainen et al. or Soedjak et al. or Rule.

The Examiner has also mentioned prior art which is made of record and not relied upon. Specifically, the Examiner makes reference to Hashisaka et al., which concerns itself with reducing colour migration during storage in multi-layered, caramel coloured, gel-based dessert products. Hashisaka et al. does not contain, in either layer, a thermoreversible setting agent. The thickening agent used is starch - this is not thermoreversible. The solution of Hashisaka et al. is to require that at least one of the colourants be a negatively charged caramel colourant. At column 4, lines 38-62, it is taught that the greater the negative charge and/or the greater the weight average molecular weight, the less the migration of the colourant in the final pudding layer. This is a further alternative solution to the problem of colour migration. Hashisaka et al. neither discloses nor suggests that the water content of the top layer be maintained at less than 70% (w/w).

Applicants respectfully submit that neither Soedjak et al. nor Rule, whether taken alone or together, remedy the deficiencies of Tiainen et al.

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Absent guidance in Tiainen et al. to consider the water content of the top layer as an issue, there is nothing to motivate a person skilled in the art to combine the disclosure of Soedjak et al. or Rule with the disclosure of Tiainen et al. Accordingly, Applicants respectfully request withdrawal of this rejection.

Wherefore, none of the cited art, whether taken alone or together, discloses or suggests the role of the water content of the top layer in a beverage food product having top and base layers, in colour migration between layers when a gelled beverage food product is heated. Accordingly, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

If Examiner Bhat has any additional questions or reservations, it is requested that Examiner Bhat call the undersigned attorney. Applicants' undersigned attorney may be reached by telephone at 616/988-4104. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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